Develop Multi-Modal Transportation Subarea Plans

Activity Purpose and Overview

This Multi-Modal Transportation Study recommendation calls for the development of a series of "Multi-Modal Transportation (MMT) Subarea Plans" for selected locations and districts throughout the city. These plans are intended to serve as catalysts for applying various multi-modal design concepts at the neighborhood, institutional, and commercial center level.

Multi-modal concepts are often thought of as global, community-based techniques for expanding mobility opportunities. However, as with so many planning and development concepts, the ultimate success of their application really hinges upon their use at a smaller, more human scale. Neighborhoods and commercial areas that aren't "multi-modal friendly" work against the success of multi-modal concept at the community level. For example, if pedestrian access to transit stops is not viewed by potential bus riders as convenient, direct, and safe, any service improvements to StarTran's operations are effectively negated.

The multi-modal transportation subarea planning process recommended by the Task Force will serve to achieve several important MMT objectives:

1. Introduce local residents to multi-modal transportation concepts at the neighborhood level and, in turn, educate the citizenry about the benefits to be derived from expanding mobility choices for all persons.

2. Identify opportunities for enhancing the health, safety, and quality of life of Lincoln neighborhoods and other areas by improving pedestrian, bicycle and transit facilities.

3. Allow neighborhood organizations and home-owner associations to craft cohesive long term programs of pedestrian, bicycle, and transit improvements the serve the homes, neighborhood schools, parks and playgrounds, and local businesses in their immediate vicinity.

4. Stimulate small area and city-wide economic development by offering greater mobility for residents within and between neighborhoods and commercial and employment centers.

5. Demonstrate how various modal alternatives are impacted by existing development patterns and how land use policies and incentives will enhance the expanded use of multi-modal transportation services.

Over a period of time, the multi-modal transportation subarea planing process would result in a series of formal written plans. The subarea plans would detail potential projects and polices intended to further multi-modal transportation objectives embodied in the City-County Comprehensive Plan.

These subarea plans would be prepared by city staff or by neighborhood organizations and/or business districts with technical support from city staff. The plans would serve as the basis for programming public and private capital or service improvements as part of public-private partnerships, city sponsored efforts, or as self-help activities.

Activity Description

It is commonplace for more progressive communities across the country to prepare subarea plans addressing the needs of pedestrian, bicycle, or public transit services. Few communities, however, take a comprehensive look at how all three work together, along with their relationship to streets and land uses.

This MMT Plan proposes to do what few cities have done – i.e, take an expanded view at the subarea level of how the various parts of the "transportation system" work best and how they work best together. Our community's transportation system – and the mobility opportunities it can offer all persons – is in fact a network of interrelated parts. Each of these parts performs to its individual highest level when the planning and implementation is viewed in its entirety. This also allows for the most effective use of limited public and private resources – i.e., tax dollars and private contributions.

As outlined below, "Multi-Modal Transportation Subarea Plans" would be prepared for a handful of locations across the City of Lincoln. These might include:

- "Pedestrian Activity Centers" as shown in the adopted City-County Comprehensive Plan;
- Downtown Lincoln;
- Westfield Shopping Complex;
- Institutional Districts;
- Established Neighborhoods and HomeOwner Association Areas;
- Emerging Neighborhoods or Growth Areas.

The balance of this section presents a generic outline of how such a MMT Subarea Planning Process would work. The process description is certainly subject to change and refinement as Plans are created and implemented. The process should be flexible and should be molded to meet the needs of the particular circumstances. The following is not meant to be prescriptive.

As envisioned by the Multi-Modal Transportation Task Force, the "MMT Subarea Planning Process" would likely encompass the following seven steps:

- **Step 1 – Establish Study Area Boundaries.** Determining the geographic extent of the study is a key first step. The study area should be large enough to capture the impact and influences of all modes being considered, but not so large that the detailed dynamics of the area's mobility needs are obscured. In most cases, it is presumed the boundaries of an established neighborhood organization could serve as the subarea planning area. For business and institutional districts, the boundaries should embrace adjoining residential development as well.

  In defining the boundaries, activity centers/nodes should be identified, including schools, parks and playgrounds, and business areas. Larger institutional facilities – such as high schools – can easily attract pedestrian activity from a radius of up to a mile and a half. Land use maps and aerials should be used in determining the study area boundary. "Attractors" – facilities and sites people want to go to – should be clearly identified as part of this first step.

- **Step 2 – Define Subarea Mobility Goals.** While the City-County Comprehensive Plan contains community-wide mobility goals, the specific interests and needs of the subarea being studied should also be developed. The subarea mobility goals should be broad statements reflecting both the Vision and particular concerns of the area being evaluated.

- **Step 3 – Inventory Subarea MMT Assets and Liabilities.** Information about the MMT facilities and services in the subarea should be gathered as part of the initial work of the planning process. This step should include two parts: (1) detailed description of

the pedestrian, bicycle, transit facilities/service, and streets in the subarea, including quantitative (i.e., how much/many) and qualitative (i.e, how good/bad) information; and (2) users's assessment of the "experience" of waking, biking, or taking the bus in the subarea.

FACILITIES/SERVICES SUMMARY

Characteristics of the subareas MMT facilities and services should be gathered and mapped. This may include:

Pedestrian Facilities. The location, length, width, surface material, condition, and related attributes of sidewalks, stairs and inclines, multi-use pathways, vernacular trails, marked and unmarked street crossings, and pedestrian signals.

Bicycle Facilities. The location, length, width, surface material, condition, and related attributes of bike lanes, bike trails, bike boulevards, and bike routes.

Transit Facilities and Services. The location, condition, and related attributes of bus routes, passenger boarding areas/stops, passenger boarding data, user facilities, frequency of service, and days and hours of transit operation.

Streets and Roadways. The location, condition, and related attribute roadway classifications, pavement and right-of-way width, parking limitations, driveway locations, surface materials, and stormsewer system characteristics.

USER PERCEPTIONS

The MMT subarea plan should be based on more than mere technical data and analysis. It is important the residents of the neighborhood and users of the facilities contribute their perceptions about the quality of the MMT system in their area. Various user-friendly "survey forms" for pedestrian and bicycle facilities are readily available. Examples are shown in the accompanying figures.

- **Step 4 – Identify MMT Strengths and Weaknesses.** Determining the strengths and weaknesses of a subarea's multi-modal transportation system will likely be both objective and subjective.

  In another section of this Report, "level of service" standards for pedestrian facilities are discussed. Similar standards for bikes and transit service will also need to be crafted to aid in

the preparation of these MMT subarea plans. The entire set of standards should be developed by staff – working in conjunction with users and community groups – to aid in the preparation of the subarea plans. These would provide the "objective" measures for determining the status of MMT facilities and services in the study areas.

On a more subjective level, the informal user surveys can be employed to identify perceptional strengths and weaknesses regarding the area's overall MMT system. The ideas generated by this effort should be captured in both text and map form, and then categorized into major topic areas. Some of the generic impressions this process can produce are exemplified below for the pedestrian and bicycle modes:

"Walkability Indicators"

- Did you have room to walk?
  - Sidewalks or paths started and stopped
  - Sidewalks broken or cracked
  - Sidewalks blocked
  - No Sidewalks, paths or shoulders
  - Too much traffic
- Was it easy to cross streets?
  - Road too wide
  - Traffic signal timnig too long/too short
  - Crosswalks/signals needed
  - View of traffic blocked by parked cars, trees, or plants
- Did drivers behave well?
  - Backed without looking
  - Did not yield
  - Turned into walkers
  - Drove too fast
  - Sped up to make light
  - Drove through red lights
- Was your walk pleasant?
  - Needs grass, flowers, trees
  - Scary dogs
  - Scary people
  - Not well lit
  - Dirty, litter

"Bikeability Indicators"

- Did you have a place to bicycle safely?

ON ROAD

  - No space for bicyclists to ride
  - Bicycle lane or paved shoulder disappeared
  - Heavy and/or fast moving traffic

- Too many trucks or buses
- No space for bicyclists on bridges or in tunnels
- Poorly lighted roadways

OFF ROAD

- Path ended abruptly
- Path didn't go where I wanted to go
- Path intersected with roads that were difficult to cross
- Path was overcrowded
- Path was unsafe because of turns or terrain
- Path was uncomfortable because of too many hills
- Path was poorly lit

- How was the surface you rode on?
  - Potholes
  - Cracked or broken pavement
  - Debris (e.g., broken glass, sand, gravel, etc.)
  - Uneven surfaces or gaps
  - Slippery srufaces when wet
  - Bumpy or angled railroad tracks
  - Rumble strips
- How were the intersections you rode through?
  - Had to wait too long to cross intersection
  - Couldn't see crossing traffic
  - Signals didn't give me enough time to cross
  - Signal didn't change for bicycle
  - Unsure where or how to ride through intersection
- Did driver behave well?
  - Drivers drove too fast
  - Drivers passed me too close
  - Drivers did not signal
  - Drivers harassed me
  - Drivers cut me off
  - Drivers ran red lights or stop signs
- Was it easy for you to use your bike?
  - No maps, signs, or road markings to help me find my way
  - No secure place to leave my bicycle at my destination
  - No way to take my bike on buses
  - Scary dogs
  - Hard to find a direct route I liked
  - Route too hilly
- What did you do to make your ride safer?
  - Wore a bicycle helmet
  - Obeyed traffic signals and signs
  - Rode in a straight line (didn't weave)

- Signaled my turns
- Rode with traffic
- Used lights, if riding at night
- Wore reflective materials and bright clothing
- Was courteous to other travelers

- **Step 6 – Design Suitable MMT Enhancement Strategy.** Based upon field information and other data sources, accepted facility/service LOS standards, and community and subarea goals, a multi-year MMT enhancement strategy should be prepared for the study area. The analysis supporting the strategy should be completed in consultation with the participating organizations and involve a full range of staff experts including planning and engineering professionals.

  The MMT enhancement strategy should described the specific project and policy approaches being recommended, with sufficient detail to define location, timing, costs, implementation responsibility, and anticipated derived benefits.

  As noted earlier, the planning process defined in this report is not meant to be prescriptive or rigid in its application. Similarly the ideas for crafting the best possible solution for each area's peculiar transportation constraints and opportunities will vary. This having been said, some of the options for consideration in defining a MMT program for a subarea could include:

  - Pedestrian and bicycle maps
  - Advanced techniques for street crossings (e.g., textured materials, angled crossings, overhead signs, leading pedestrian interval (LPI) signal phasing)
  - Educational materials for pedestrian, bicyclists and motorists
  - Supplemental pedestrian crossing channelizing devices
  - Traffic calming devices
  - Grade separations
  - Bicycle racks at strategic locations
  - Bike lanes and boulevards
  - Sidewalk and pathway maintenance and snow removal
  - Ped/bike crash analysis program

- **Step 7 – Adopt MMT Enhancement Strategy.** As MMT Subarea Plans are completed, the need to formally "adopt" the Plan may be found to vary. In some cases, the neighborhood association may find that merely preparing the plan may be sufficient to serve as the basis for pursing desired improvements. In other cases, such as for larger commercial districts, formal acceptance by the City may be sought. In either case, the final planning document should be maintained on file with the City-County Planning Department, Public Works and Utilities Department, Parks and Recreation Department and Urban Development Department. These departments should consult the plans as capital improvement programs and service delivery strategies are developed.

  All final MMT subarea plans should also be placed on the city's InterLinc website for easy reference by members of the community and staff.

Activity Time Line and Responsibility

The overall MMT subarea planning and implementation program called for in this Report may be viewed in some quarters as "ambitious." The program does, however, affirm the importance of the City-County Comprehensive Plan's objective of "developing a balanced transportation system that meets the needs of the community..." The goal of enhancing the "integration and connectivity" of our transportation system called for in Federal transportation legislation requires us to view the planning and programming process in perhaps a broader way then we have in the past.

A "MMT Subarea Planning Process" is but one small step in this direction. The subarea plans generated through this process offer a grass-roots mechanism for detailing the projects and policies needed by our neighborhoods to achieve community-wide transportation goals.

The responsibility for formulating MMT Subarea Plans is a shared one – jointly held by the City and the entire community.

The City of Lincoln most assuredly must play the primary role in furthering the concept. Potential study areas should be identified over the three months following the adoption of this recommendation by the elected officials. This task should take into consideration areas already highlighted in the adopted Comprehensive Plan, as well as where interest is expressed by neighborhood organizations and business districts. This may include traditional neighborhoods and commercial districts (such as University Place, College View, or Havelock), as well as larger commercial areas (such as Westfield Mall-Gateway.)

The goal should be to complete at least one subarea plan over the following twenty four month period and to work during this time for its implementation. Upon completion and initial implementation of a plan, the MMT subarea planning process should be reviewed by staff – in consultation with the community – to determine how the process might be improved and made more effective.

Public involvement during the preparation and adoption of these plans should be stressed. Local residents and business owners are most familiar with their neighborhoods. They have a fundamental understanding of how their area works. They can bring to the process critical and detailed background knowledge about the day-to-day functioning of their neighborhood.

Activity Resource Needs

Depending upon the demand for other required and requested work products, the preparation of MMT Subarea Plans should be done primarily with existing local staff. In some cases it may be desirable to employ additional assistance to address specialized issues. It is recommended between $5,000 and $10,000 in Federal planning funds be set aside each fiscal year for such services.

It is also strongly encouraged that volunteer support from neighborhood organizations, other study participants, and interested community organizations be used in gathering information and completing the assessment process.

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